



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/792,104	03/03/2004	Jeffrey D. Minelli	702.304	4088

7590 09/10/2004

Devon A. Rolf  
GARMIN INTERNATIONAL, INC.  
1200 East 151st Street  
Olathe, KS 66062

EXAMINER

MANCHO, RONNIE M

ART UNIT	PAPER NUMBER
----------	--------------

3663

DATE MAILED: 09/10/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/792,104

Applicant(s)

MINELLI, JEFFREY D.

Examiner

Ronnie Mancho

Art Unit

3663

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 07 June 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8 and 10-28 is/are rejected.
- 7) ☒ Claim(s) 9 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 6/07/04.
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Specification*

1. The disclosure is objected to because of the following informalities:

In the specification, the applicant is advised to amend the specification to indicate that the present case is a continuation of parent case No. 10/185604, now US patent No. 6721651.

Appropriate correction is required.

### *Claim Rejections - 35 USC § 103*

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-8, 10-12, 17, 20, 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over White et al (6532152) in view of Maeda et al (6356259).

Regarding claim 1, White et al disclose a hand-held electronic device (col. 11, lines 26-31, figs. 1-3) including a navigational (GPS; col. 10, lines 45-60; figs. 7&8) component comprising:

a housing 202 (col. 11, lines 25-38, figs. 1-3), the housing 202 having an opening 210 (col. 11, lines 51-55; figs. 1-3) therein;

a display 114 (col. 11, lines 51-55; figs. 1-3) viewable through a touch panel 212 (col. 11, lines 51-55; figs. 1-3) mounted in the opening 210 of the housing 202; a mounting member 300 (col. 14, lines 9-19; fig. 3) circumscribing the opening 210, the mounting member 300 including

a pocket (U-shape; col. 14, lines 9-15) for holding an adhesive (col. 14, lines 17-19) and applying the adhesive about the periphery of the touch panel 212 (col. 14, lines 49-52).

On the other hand, White et al did not provide the detailed specifics about the structure of the touch panel. However, Maeda et al (fig. 2) teaches of the detail structure of a touch panel including:

a layer of rigid material 3 (col. 7, lines 26-40); and

a flexible substrate layer 2 (col. 7, lines 41-54) positioned near the layer of rigid material.

Therefore, it would have been obvious to one of ordinary skill in the art of display panels to modify the White et al device as taught by Maeda et al for the purpose of providing a touch panel with better temperature variation tolerance and improved consistency and reliability of operation (Maeda, abstract).

Regarding claim 2, White et al disclose the hand-held electronic device including a navigational component of claim 1 including an adhesive. Although White et al indicated that any adhesive can be used, they did not particularly mention a flexible adhesive. However, Maeda et al (col. 10, claim 6) teaches of a touch panel of a hand held electronic device wherein the adhesive is a flexible adhesive (col. 7, lines 21-26).

Therefore, it would have been obvious to one of ordinary skill in the art of display panels to modify the White et al device as taught by Maeda et al for the purpose of providing a touch panel with better temperature variation tolerance and improved consistency and reliability of operation (Maeda, abstract).

Regarding claim 3, White et al disclose the hand-held electronic device including a navigational component of claim 1 including an adhesive. Although White et al did not

particularly mention a flexible, waterproof adhesive, they indicated that any adhesive can be used. In addition, Maeda et al (col. 10, claim 6) teaches of a touch panel of a hand held electronic device wherein the adhesive is a flexible, waterproof adhesive (col. 8, lines 10-24).

Therefore, it would have been obvious to one of ordinary skill in the art of display panels to modify the White et al device as taught by Maeda et al for the purpose of providing a touch panel with better temperature variation tolerance and improved consistency and reliability of operation (Maeda, abstract).

Regarding claim 4, white et al disclose the hand-held electronic device including a navigational component of claim 1 including an adhesive. Although White et al did not particularly mention that the adhesive is curable using an ultraviolet light, they indicated that any adhesive can be used. In addition, Maeda et al (col. 10, claim 6) teaches of a touch panel of a hand held electronic device wherein the adhesive is curable using an ultraviolet light (col. 7, lines 21-26).

Therefore, it would have been obvious to one of ordinary skill in the art of display panels to modify the White et al device as taught by Maeda et al for the purpose of providing a touch panel with better temperature variation tolerance and improved consistency and reliability of operation (Maeda, abstract).

Regarding claim 5, White et al disclose the hand-held electronic device including a navigational component of claim 1 including an adhesive. Although White et al did not particularly mention that the adhesive is rigid, they indicated that any adhesive could be used. In addition, Maeda et al (col. 10, claim 6) teaches of a touch panel of a hand held electronic device wherein the adhesive is rigid (col. 7, lines 21-26).

Therefore, it would have been obvious to one of ordinary skill in the art of display panels to modify the White et al device as taught by Maeda et al for the purpose of providing a touch panel with better temperature variation tolerance and improved consistency and reliability of operation (Maeda, abstract).

Regarding claim 6, white et al disclose the hand-held electronic device including a navigational component of claim 1 further comprising a shock absorbing member (col. 14, lines 15-21).

Regarding claim 7, white et al disclose the hand-held electronic device including a navigational component of claim 6 wherein the shock absorbing member includes a layer of foam material.

Regarding claim 8, white et al disclose the hand-held electronic device including a navigational component of claim 1 further comprising:

a backing member (fig. 336, 342, etc, fig. 3B) that fits within the housing, the backing member having a portion positioned near the touch panel; and

a shock absorbing member 300 including a portion which is sandwiched between the backing member and the layer of rigid material of the touch panel 212 (figs. 3).

Regarding claim 10, White et al disclose the hand-held electronic device including a navigational component of claim 1 wherein the mounting member is molded with the housing (figs. 3).

Regarding claim 11, White et al disclose the hand-held electronic device including a navigational component of claim 1 wherein the mounting member is integral with the housing (figs. 3).

Regarding claim 12, White et al disclose a hand-held electronic device (col. 11, lines 26-31, figs. 1-3) including a navigational (GPS; col. 10, lines 45-60; figs. 7&8) component comprising:

a housing 202 (col. 11, lines 25-38, figs. 1-3), the housing 202 having an opening 210 (col. 11, lines 51-55; figs. 1-3) therein;

a display 114 (col. 11, lines 51-55; figs. 1-3) viewable through a touch panel 212 (col. 11, lines 51-55; figs. 1-3) mounted in the opening 210 of the housing 202;

a mounting member 300 (col. 14, lines 9-19; fig. 3) circumscribing the opening 210, the mounting member 300 including a pocket (U-shape; col. 14, lines 9-15) for holding an adhesive (col. 14, lines 17-19) and applying the adhesive about the periphery of the touch panel 212 (col. 14, lines 49-52);

a processor (fig. 1) located within the housing; and

a memory (fig. 1) in communication with the processor, the touch panel 212 in communication with the processor and the memory, the processor and memory capable of performing a route calculation (col. 10, lines 45 to col. 11, lines 1-25) viewable on the display (figs. 1-3).

On the other hand, White et al did not provide the detailed specifics about the structure of the touch panel. However, Maeda et al (fig. 2) teaches of a detail structure of a touch panel for an electronic housing including:

a layer of rigid material 3 (col. 7, lines 26-40); and

a flexible substrate layer 2 (col. 7, lines 41-54) positioned near the layer of rigid material.

Therefore, it would have been obvious to one of ordinary skill in the art of display panels to modify the White et al device as taught by Maeda et al for the purpose of providing a touch panel with better temperature variation tolerance and improved consistency and reliability of operation (Maeda, abstract).

Regarding claim 17, White et al disclose the hand-held electronic device of claim 15, but did not provide the detailed specifics about the structure of the touch panel. However, Maeda et al (fig. 2) teaches of a detail structure of a touch panel for an electronic housing including:

a layer of rigid material 3 (col. 7, lines 26-40); and

a flexible substrate layer 2 (col. 7, lines 41-54) positioned near the layer of rigid material.

Therefore, it would have been obvious to one of ordinary skill in the art of display panels to modify the White et al device as taught by Maeda et al for the purpose of providing a touch panel with better temperature variation tolerance and improved consistency and reliability of operation (Maeda, abstract).

Regarding claim 20 White et al discloses the hand-held electronic device of claim 15, wherein the fluid seal includes an adhesive (col. 13, lines 39-42), but did not particularly mention the type of adhesive used. However, Maeda et al (col. 10, claim 6) teaches of a touch panel of a hand held electronic device wherein the adhesive is a flexible adhesive (col. 8, lines 10-24).

Therefore, it would have been obvious to one of ordinary skill in the art of display panels to modify the White et al device as taught by Maeda et al for the purpose of providing a touch panel with better temperature variation tolerance and improved consistency and reliability of operation (Maeda, abstract).



Regarding claim 21, White et al discloses the hand-held electronic device of claim 15, including a fluid seal, wherein the fluid seal includes a groove (figs. 2&3) for holding an adhesive (col. 13, lines 39-42), but did not particularly mention the type of adhesive used. However, Maeda et al (col. 10, claim 6) teaches of a touch panel of a hand held electronic device wherein the adhesive is a flexible adhesive (col. 8, lines 10-24).

Therefore, it would have been obvious to one of ordinary skill in the art of display panels to modify the White et al device as taught by Maeda et al for the purpose of providing a touch panel with better temperature variation tolerance and improved consistency and reliability of operation (Maeda, abstract).

4. Claims 13, 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over White et al (6532152)/Maeda et al (6356259) as applied to claims 12 above, and further in view of Shimada (2002/0152025).

Regarding claim 13, White et al/Maeda et al disclose the hand-held electronic device including a navigational component of claim 12, but did not mention dead reckoning. However, Shimada teaches of a hand-held electronic device (PDA; section 0145) including a navigational component (figs 1&2) comprising a device 11 (Gyro; sections 0058, 0145) capable of performing a dead reckoning calculation.

Therefore, it would have been obvious to one of ordinary skill in the art of navigation at the time the invention was made to modify the White /Maeda et al device as taught by Shimada for the purpose of augmenting the GPS system in periods when satellite signals are not available.

Regarding claim 14, White/Maeda et al disclose the hand-held electronic device including a navigational component of claim 12, but did not mention dead reckoning and a gyro.

Art Unit: 3663

However, Shimada teaches of a hand-held electronic device (PDA; section 0145) including a navigational component (figs 1&2) comprising a device 11 capable of performing a dead reckoning calculation includes a rate gyro (Gyro; sections 0058).

Therefore, it would have been obvious to one of ordinary skill in the art of navigation at the time the invention was made to modify the White /Maeda et al device as taught by Shimada for the purpose of augmenting the GPS system in periods when satellite signals are not available.

### ***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claim 15, 16, 18, 19, 22-28 is rejected under 35 U.S.C. 102(b) as being anticipated by White et al (6532152).

Regarding claim 15 White et al disclose a hand-held electronic device comprising:

a housing (figs.2-5, the housing having an opening (figs 1-3) therein;

a processor 102 (figs. 1, 7) located within the housing;

a memory 104, 106 (figs. 1, 7) located within the housing, the memory in communication (see communication bus 110, col. 5, lines 29-54) with the processor 102;

a display 114 (col. 6, lines 53-60; col. 5, lines 29-31) in communication with the processor 102 and the memory 104, 106, the display 114 viewable through a touch panel 112 mounted in the opening in the housing (figs. 3; col. 14, lines 9-24);

a first component (wireless WAN/LAN card 718, col. 19, lines 54-62) adapted to perform a first function; and

a second component (GPS, 720; col. 19, lines 54-62) adapted to perform a second function, one of the first component 718 and the second component 720 including a navigational component, the navigational component including an antenna 224, 226 (col. 12, lines 64 to col. 13, lines 1-9) adapted to acquire position signals (col. 10, lines 45-67), the housing including a flange 204 (figs 2 & 3) around the opening in the housing, the flange further comprising:

a fluid seal 314 (col. 14, lines 42-55) to prevent fluid flow past the touch panel 112 into the housing; and

a shock mount 300 (col. 14, lines 9-21).

Regarding claim 16 White et al disclose the hand-held electronic device including a navigational component of claim 15 wherein the antenna is an internal patch antenna (col. 13, lines 5-9). Note! Although a patch antenna was not expressly cited in white et al, patch antennas are well known in the art.

Regarding claim 18 White et al disclose the hand-held electronic device of claim 15 further comprising an instruction set for controlling the processor (col. 5, lines 14-28) and memory to perform a route calculation (col. 10, lines 61 to col. 11, lines 1-25).

Regarding claim 19 White et al disclose the hand-held electronic device of claim 15 further comprising an instruction set for controlling the processor and memory to perform a route calculation, the instruction set including user interface instructions to display the results of the route calculation on the display (col. 10, lines 61 to col. 11, lines 1-25).

Regarding claim 22 White et al disclose the hand-held electronic device of claim 15, wherein the fluid seal includes a gasket 314.

Regarding claim 23 White et al disclose the hand-held electronic device of claim 15, wherein the shock mount includes viscous-elastic material (col. 14, lines 15-17).

Regarding claim 24 White et al disclose a navigation system comprising:

a mass storage device (central dispatch office; col. 10 lines 61 to col. 11, lines 3-16) adapted to store navigation data;

a server (see LAN/WAN, col. 11, lines 1-16) adapted to communicate with the mass storage; and

a portable, multi-function electronic device (figs. 1-4) further comprising:

a housing having an opening (figs. 2&3) therein;

a processor 102 (fig. 1) located within the housing;

a memory 104, 106 (fig. 1) located within the housing, the memory in communication with the processor 102 (col. 5, lines 14-58); and

a display 114 (col. 6, lines 53-60; col. 5, lines 29-31) in communication with the processor 102 and the memory 104, 106, the display 114 viewable through a touch panel 212 (figs. 2&3) mounted to the opening in the housing, the housing including a flange 204 (figs. 2&3) around the opening in the housing, the flange further comprising:

a fluid seal 314 (col. 13, lines 23-27, lines 38-42; col. 16, lines 35-37) to prevent fluid flow past the touch panel 212 and into the housing;

a shock mount 300 (col. 14, lines 9-15); and

an antenna 224, 226 (col. 12, lines 64 to col. 13, lines 1-9) within

Art Unit: 3663

the housing for communicating with the server (see LAN/WAN, col. 11, lines 1-16), the multi-function electronic device including a navigation GPS (col. 10, lines 45-67; col. 11, lines 1-16) device adapted to perform a route calculation.

Regarding claim 25 White et al disclose the navigation system of claim 24 wherein the navigation device further comprises an instruction set for controlling the processor (col. 5, lines 14-28) and memory to perform a route calculation (col. 10, lines 61 to col. 11, lines 1-25).

Regarding claim 26 White et al disclose the navigation system of claim 25, wherein the instruction set includes user interface instructions for displaying the results of the route calculation on the display (col. 5, lines 14-28; col. 10, lines 61 to col. 11, lines 1-25).

Regarding claim 27 White et al disclose the navigation system of claim 25, wherein at least a portion of the instruction set is resides within the processor and memory (col. 5, lines 14-28; col. 10, lines 61 to col. 11, lines 1-25).

Regarding claim 28 White et al disclose the navigation system of claim 25, wherein at least a portion of the instruction set is transmitted to the portable, multi-function electronic device from the server (col. 10, lines 61 to col. 11, lines 1-25).

### ***Allowable Subject Matter***

7. Claim 9, is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

8. The following is a statement of reasons for the indication of allowable subject matter:

Art Unit: 3663

In claim 9, the prior art does not disclose the limitation "a second shock absorbing member including a portion which is sandwiched between the flexible member of the touch panel and the mounting member" when taken in context with the other limitations.

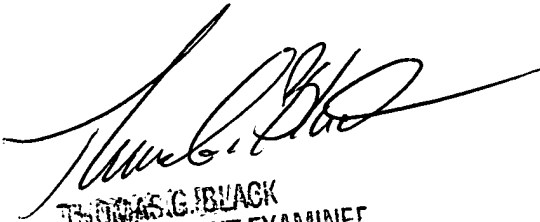
*Communication*

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ronnie Mancho whose telephone number is 703-305-6318. The examiner can normally be reached on Mon-Thurs: 9-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tom Black can be reached on 703-305-9707. The fax phone numbers for the organization where this application or proceeding is assigned are 703-305-7687 for regular communications and 703-305-7687 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1113.

August 31, 2004.

  
THOMAS G. BLACK  
SUPERVISORY PATENT EXAMINER  
GROUP 3600